

MUFG UNION BANK, N.A.
ECONOMIC RESEARCH (NEW YORK)
CHRISTOPHER S. RUPKEY, CFA
MANAGING DIRECTOR
CHIEF FINANCIAL ECONOMIST
(212) 782-5702
crupkey@us.mufg.jp

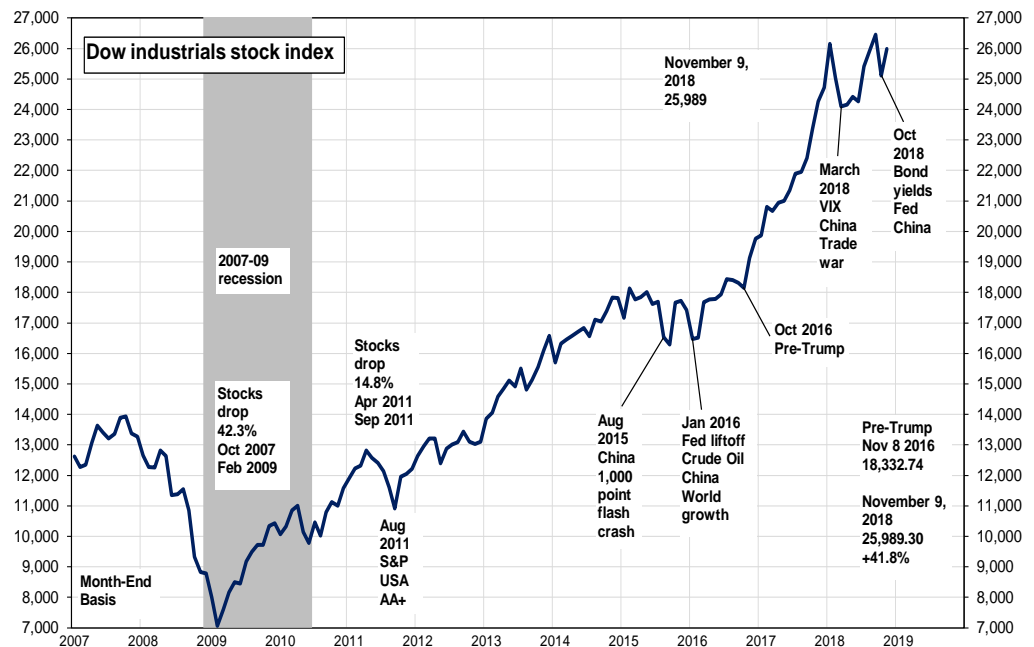
9 NOVEMBER 2018

MUFG Bank, Ltd.
A member of MUFG, a global financial group

STOCK MARKET AS PREDICTABLE AS WASHINGTON THIS YEAR

Volatile as in you never know when it's going to blow. Never know when the stock market is going to lash out at the economy. Completely unpredictable.

A couple of cold water plunges this year. S&P 500 high-to-low down 11.8% in February and after coming back and making record highs, plunged 11.5% in October. All forgotten. On Friday, Dow industrials closed up 5.1% year-to-date near the best for the year of +8.5% year-to-date. No one panicked. Can't really have a recession can you if



“financial markets” don’t collapse. Our own informal survey finds investors don't care if stocks fall 10 percent. Nobody mentioned it. They don't care about what their leaders in Washington do either. They apparently just don't care. Makes us wonder if there is a business cycle anymore. A business cycle that could stop advancing. The economy can run on and on and on. This economic expansion will set records next July. At the very least, a selloff in stocks is unlikely to be the leading indicator it once was that forecasts a recession. Unless prices tumble harder. 20 percent. Anyway, the latest Wall Street turbulence isn't hurting Main Street. It isn't even hurting Wall Street.

Maybe part of the public's nonchalance at stock market deep dives is the financial crisis and recession over a decade ago drove them out of the stock market. The S&P 500 collapsed 38.4% in 2008, and

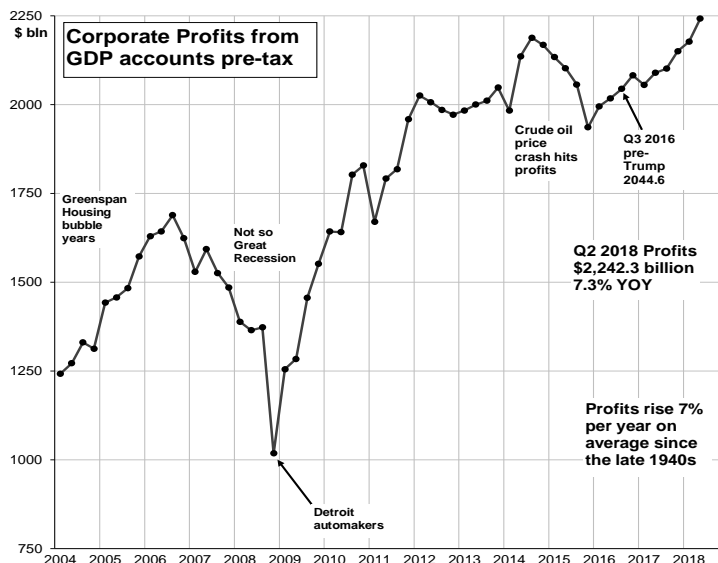
we don't want to scare people with how far it really declined from the highest day to the darkest day. Public polls show 62% of Americans held stocks before the 2008 market crash where 54% own stocks today (including 401K investors). The other reason "people don't panic" is maybe because the public looks at their financial statements only monthly, where the month-end chart on the first page of this report makes it look like there is nothing seriously wrong with the market. Dow industrials are still up 41.8% since Trump was elected two years ago. Remember the day.

Dow industrials market sell-offs						
Week ending Fridays						
Chg %	Points	High	Low	High	Low	Reason
-15.1	-1909.7	7-22-11	9-23-11	12681.2	10771.5	S&P USA AA+, Fed sees "significant" downside risks
-8.4	-1109.7	4-27-12	6-1-12	13228.3	12118.6	European sovereign debt crisis pre-Dragehi do whatever
-7.5	-1021.8	10-5-12	11-16-12	13610.2	12588.3	Fiscal cliff
-5.4	-848.05	8-2-13	8-30-13	15658.4	14810.3	Bond yields taper tantrum, Syria
-5.2	-899.33	9-19-14	10-17-14	17279.7	16380.4	Ebola, IMF cuts world growth forecast
-11.9	-2170.2	5-15-15	9-4-15	18272.6	16102.4	China, oil, 1,000 point flash crash Monday, Aug 24
-10.8	-1936.5	11-6-15	2-12-16	17910.3	15973.8	Fed liftoff, China, \$20 oil, world growth, Japan negative rates
-5.3	-947.99	June 2016		18011.1	17063.1	Brexit: Two days June 23 close to Monday, June 27 low
-11.6	-3083.5	1-26-18	3-23-18	26616.7	23533.2	VIX-Linked Notes; China; Trade war(s)
-7.7	-2055.2	9-21-18	10-26-18	26743.5	24688.3	Fed rate hikes, 3.2% 10-yr yields, China (trade war)

What about professionals in the market? Money managers. They seem to be worried about corporate earnings after the Tax Cuts and Jobs Act stimulus effect starts to fade. The market struggles at times over what is fair value. The Price-Earnings Ratio (PE) was 19.12 at Friday night's close, 19 times earnings. One can drive a truck through the range of "value." Wall Street fixed income participants are often mystified by this as bond yields are valued much more tightly by Fed policy, inflation, supply/demand. The S&P 500 PE ratio was above 25 in 1998 and 1999 during the dot-com stock market bubble, and stocks were down at 10 times earnings in the 70s/early 80s with high inflation and three recessions in ten years.

Pre-tax corporate profits that comes out with the GDP report, dropped after the oil crash, and was recovering when Trump was elected in Q4 2016. The latest Q2 2018 pre-tax earnings are up 7.3% in the last year, while after-tax is up 15.8% due to the "biggest corporate tax cut in history." Sometimes recessions get started as corporate earnings slow and this slows business investment, capex spending being one of the biggest swing factors in boom times and bust times. Things look okay for the economic outlook for now. Dow industrials are up 5.1% year-to-date. It is important to remember, as Washington senior policy officials remind us from time to time during periods of stock market turbulence: the fundamentals of the United States economy are strong and have been for the past several years, and the prospects for continued growth, with low inflation and low unemployment, are strong. Okay. Buy, buy, buy, buy, buy.

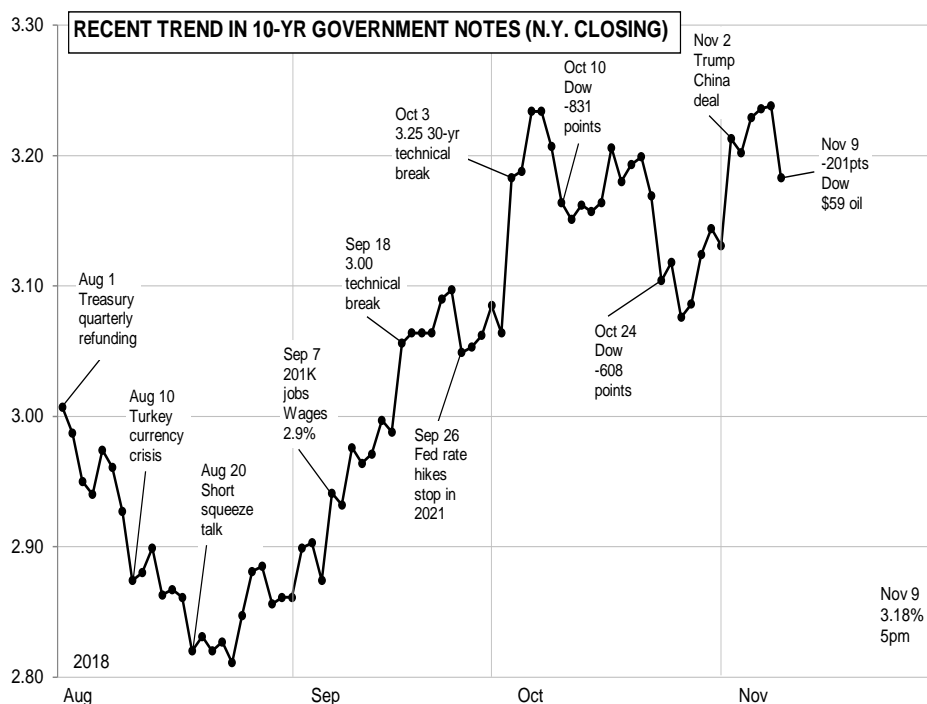
Corporate Profits						
\$bln	Q2 2018	Q1 2018	Q4 2017	Q3 2017	2017	2016
Pre-tax	2,243.2	2,177.3	2,150.7	2,089.5	2,099.3	2,035.0
% change	3.0	1.2	2.4	0.6	3.2	-1.1
Taxes	234.8	212.0	333.8	365.2	350.7	392.9
% change	10.7	-36.5	-8.6	2.6	-10.7	-1.1
After-tax	2,007.5	1,965.3	1,816.8	1,735.9	1,748.6	1,642.1
% change	2.1	8.2	4.7	0.1	6.5	-1.1



MARKETS OUTLOOK

	28-Sep 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
30-Yr Treasury	3.21	3.25	3.40	3.45	3.65	3.60	3.80	3.85	3.85	3.95	3.95
10-Yr Note	3.06	3.10	3.20	3.30	3.50	3.50	3.70	3.80	3.80	3.95	3.95
5-Yr Note	2.95	3.00	3.10	3.20	3.40	3.45	3.65	3.75	3.80	3.95	3.95
2-Yr Note	2.82	2.90	3.00	3.15	3.40	3.40	3.60	3.75	3.80	4.00	4.00
3-month Libor	2.40	2.70	2.95	3.20	3.45	3.45	3.70	3.90	3.90	4.20	4.15
Fed Funds Rate	2.25	2.50	2.75	3.00	3.25	3.25	3.50	3.75	3.75	4.00	4.00
2s/10s spread	24	20	20	15	10	10	10	5	0	(5)	(5)
Libor/funds spd	15	20	20	20	20	20	20	15	15	20	15

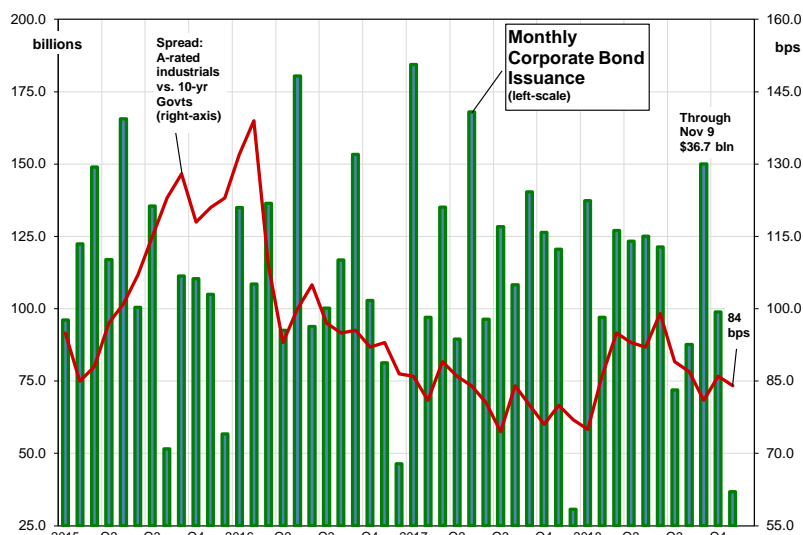
Lots of news with midterm elections, Treasury quarterly refunding auctions of 3-years, 10-years, and 30-years, and the Fed meeting Thursday, but bond yields closed Monday-Thursday in a tight range at 3.20 to 3.24 percent. The stock market, Dow industrials, fell 201 points on Friday (308 points intraday), bringing bond yields back down from 3.24% Thursday to 3.18% at Friday's close. Stocks fell on China worries and \$59 oil. The midterm election reaction was interesting, fears of a blue wave sent stocks and yields down,



false alarm on the blue wave had yields rebounding to the high of the week of 3.25% around 9pm Tuesday night before coming back down again by morning. Here we sit. Dec. 19 rate hike odds 80%.

CORPORATES: VOLKSWAGEN, SHELL, MARATHON PETROLEUM, DUKE, CSX

Corporate offerings were \$28.6 billion in the November 9 week versus \$22.3 billion in the November 2 week. On Tuesday, Waste Connections priced a \$500 million 4.25% 10-yr (m-w +20bp) at 105 bps (Baa2/BBB+). The waste services company (40 US states and 6 Canadian provinces) will use the proceeds for general corporate purposes including acquisitions. Corporate bond yields (10-yr Industrials rated A2) were 84 bps above 10-yr Treasuries this week versus 84 bps last Friday.



Waited All Day for Fed and All's I Got Was This Stupid T-Shirt

The Fed met November 7-8 to consider its monetary policy.

Breaking economy news. Hahahahaha The Fed met today, no press conference, but there will be this meeting next year with Fed Chair Powell, assuming he still serves at the President's pleasure. Hold that thought.

Policymakers issued a press statement with no reference to policy or potential policy moves. No nod-nod, wink-wink heads up that they would raise rates a fourth time this year in December. They tweaked the first paragraph that talks about the economy and inflation. The unemployment rate "declined" where last meeting they said unemployment "stayed low." Yep, it checks out, unemployment fell to 3.7% from 3.8% the last meeting. The economy's booming, winning, thriving they added.

Hold on, there's other wording changes: household spending has "continued" to grow strongly, they added the word continued. But most importantly they said business investment had moderated where last meeting they said it had grown strongly. That's all folks. Nothing else to report today. Go back to reading those political stories on your smart phones at work, and call up your salesperson and sell everything! (Joking. Don't call your salesman to trade. Let them starve.)

Net, net, if it's not broke, don't fix it or something like that. The Fed made no changes to its game plan today and remains on a gradual path for interest rate hikes if the economy evolves as they expect. Even if they lift interest rates higher they say these moves will still be consistent with a stronger economy. There are no material risks to the outlook. The bond market sell-off and higher yields torched the stock market rally, the S&P 500 index collapsing 11.5% high to low in October, yet Fed officials don't see any risks out there that could scuttle the economic expansion.

The Fed kept with the game plan today that calls for gradual interest rate hikes as the economy continues to be strong with the tightest labor markets in decades. We expect policymakers to raise interest rates again at the December meeting this year. Bet on it.

November 8, 2018 statement

Information received since the Federal Open Market Committee met in **September** indicates that the labor market has continued to strengthen and that economic activity has been rising at a strong rate. Job gains have been strong, on average, in recent months, and the unemployment rate has **declined**. Household spending has continued to grow strongly, while growth of **business fixed investment has moderated from its rapid pace earlier in the year**. On a 12-month basis, both overall inflation and inflation for items other than food and energy remain near 2 percent. Indicators of longer-term inflation expectations are little changed, on balance.

September 26, 2018 statement

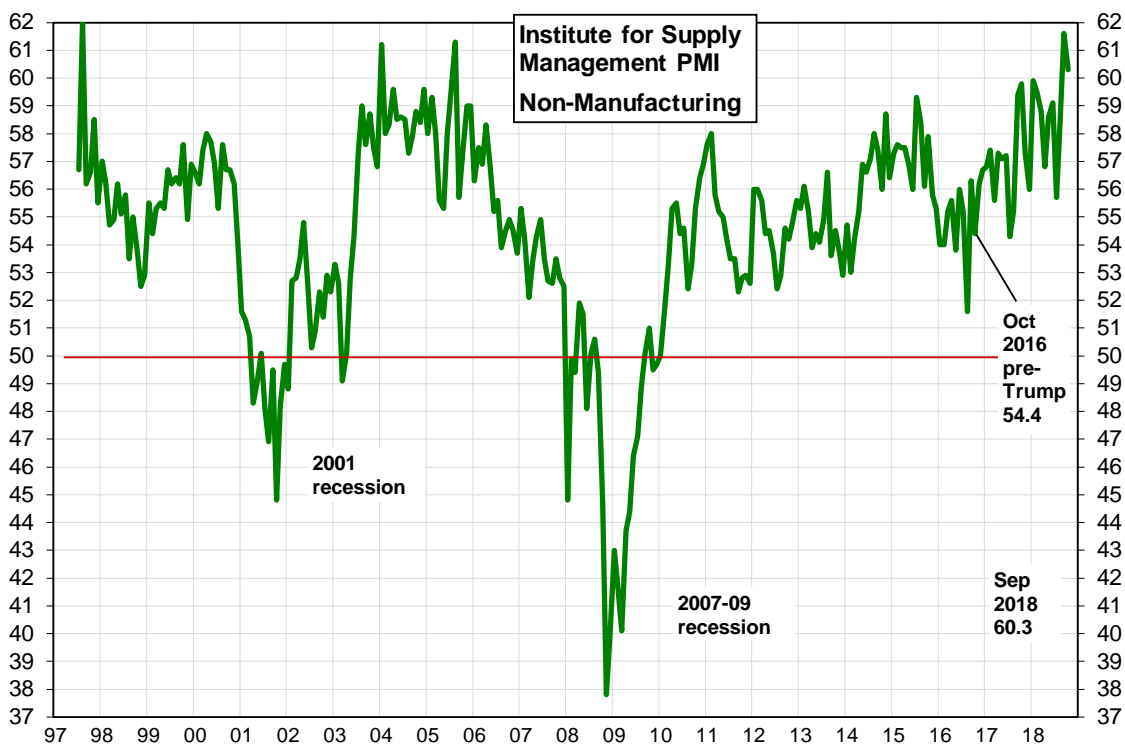
Information received since the Federal Open Market Committee met in **August** indicates that the labor market has continued to strengthen and that economic activity has been rising at a strong rate. Job gains have been strong, on average, in recent months, and the unemployment rate has **stayed low**. Household spending and **business fixed investment have grown strongly**. On a 12-month basis, both overall inflation and inflation for items other than food and energy remain near 2 percent. Indicators of longer-term inflation expectations are little changed, on balance.

OTHER ECONOMIC NEWS THIS WEEK

Services economy firing on all cylinders (Monday)

Breaking economy news. Non-manufacturing ISM fell a little to 60.3 in October from September's 61.6, the highest level looking back the last twenty years. Prices paid dropped from 64.2 to 61.5 showing there are not sufficient price pressures out there that could prompt an overly aggressive tightening stance from the Federal Reserve that could jeopardize the long economic expansion from the recession.

Net, net, the services sector continues to power the economy forward with non-manufacturing executives confident they will be able to weather the headwinds of higher interest rates and the trade war with China and the world. The Tax Cuts and Jobs Act continues to bolster service sector profits and actual sales and revenues are tracking the strengthening economy. Any hint that the midterm elections could send the economy off the rails is nowhere to be seen in today's report. Service sector companies don't see any scenario in the midterm election outcome that could roll back the tax cuts and deregulation that is giving the American economy a leg up on its foreign competitors. US growth is the strongest in the world against America's developing country trading partners. The services sector of the economy is firing on all cylinders which should make the dream that this will be the longest expansion in history come true.



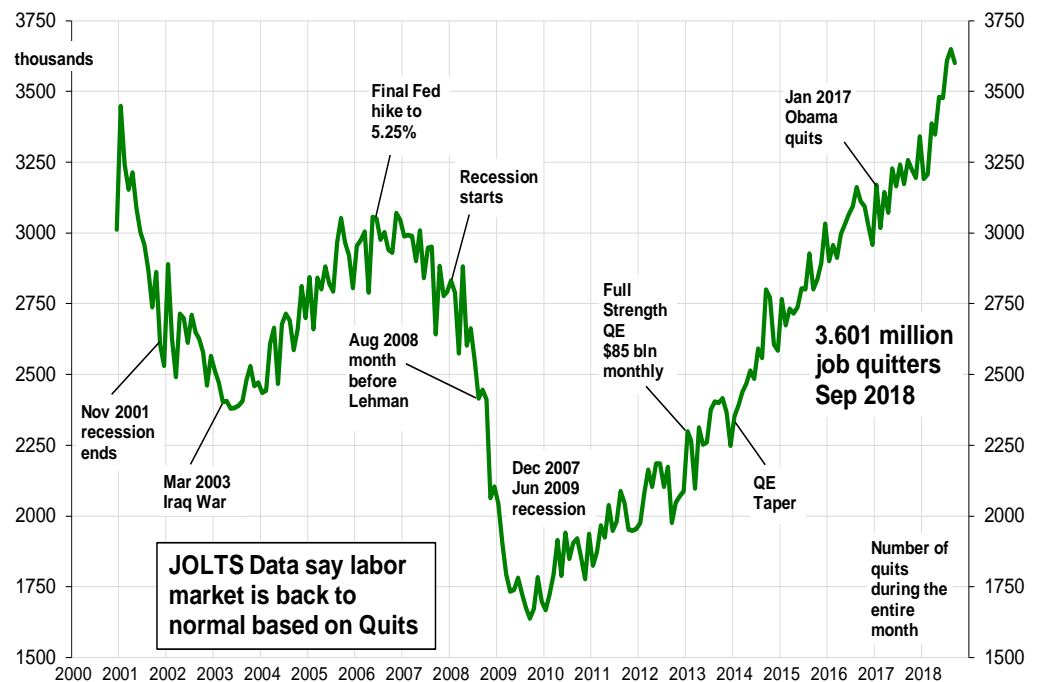
America Today: So many jobs, so many quitters (Tuesday)

Breaking economy news for those of you who took the day off. Midterm elections. Your vote counts certainly. Unless it offsets my vote. The Job Openings and Labor Turnover survey has been released for September. Jolts data continue to show the tightest labor market in a generation or two. Even if the data in current form from the Bureau of Labor Statistics (BLS) only go back to December 2000. Job openings today are 7.009 million in September 2018 which eclipses the 5.964 million unemployed in September 2018. America has run out of workers. Maybe a few can be coaxed back in from being out of the labor force. There are 95.877 million not in the labor force right now, although just 5.309 million say they currently want a job. Must be nice not having a job like these 90.568 million folks, otherwise why aren't they working. Guess they could be 9 years old or 95 years old. That's one reason not to work.

Lots of quitters out there. 3.6 million quit in September, the same number as in July and August. Hotels and restaurants saw 709 thousand quit. Shops at the mall saw 540 thousand up and walk out the door. Finance jobs and a few stray insurance cats and dogs saw 89 thousand quit. Not many quit in finance because the wages are so darn high. Not many quit in finance because the wages are so darn high.

Net, net, the labor market is churning up a storm with 3.6 million quitting their jobs in September, confident that there are more jobs out there and indeed there are plenty. 7.009 million job openings in September. Jobs are for the taking with For Hire signs up in every shop and store window on Main Street, and companies are having a hard time trying to get the help they need.

Forget are they qualified, companies will train anyone that has a heartbeat the labor market is so tight. Wages are picking up. That's a good thing. Average hourly earnings were \$27.30 in October, up 3.1% the last year. Wages would be rising higher if it wasn't for those old baby boomers retiring and giving up the \$50 hourly earnings which brings down the average. The bottom line is that the economy continues to strengthen with labor market conditions growing tighter and tighter, so this is likely to keep the Federal Reserve on the gradual path for interest rate hikes until rates get to more normal levels. Stay tuned. Story developing.



Analyst Certification

The views expressed in this report accurately reflect the personal views of **Christopher S. Rupkey**, the primary analyst responsible for this report, about the subject securities or issuers referred to herein, and no part of such analyst's compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed herein.

The information herein is provided for information purposes only, and is not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. Neither this nor any other communication prepared by MUFG Bank, Ltd. (collectively with its various offices and affiliates, "MUFG Bank") or should be construed as investment advice, a recommendation to enter into a particular transaction or pursue a particular strategy, or any statement as to the likelihood that a particular transaction or strategy will be effective in light of your business objectives or operations. Before entering into any particular transaction, you are advised to obtain such independent financial, legal, accounting and other advice as may be appropriate under the circumstances. In any event, any decision to enter into a transaction will be yours alone, not based on information prepared or provided by MUFG Bank. MUFG Bank hereby disclaims any responsibility to you concerning the characterization or identification of terms, conditions, and legal or accounting or other issues or risks that may arise in connection with any particular transaction or business strategy. While MUFG Bank believes that any relevant factual statements herein and any assumptions on which information herein are based, are in each case accurate, MUFG Bank makes no representation or warranty regarding such accuracy and shall not be responsible for any inaccuracy in such statements or assumptions. Note that MUFG Bank may have issued, and may in the future issue, other reports that are inconsistent with or that reach conclusions different from the information set forth herein. Such other reports, if any, reflect the different assumptions, views and/or analytical methods of the analysts who prepared them, and MUFG Bank is under no obligation to ensure that such other reports are brought to your attention.

Copyright 2018 MUFG All Rights Reserved

The articles and opinions in this publication are for general information only, are subject to change, and are not intended to provide specific investment, legal, tax or other advice or recommendations. The information contained herein reflects the thoughts and opinions of the noted authors only, and such information does not necessarily reflect the thoughts and opinions of MUFG or its management team. We are not offering or soliciting any transaction based on this information. We suggest that you consult your attorney, accountant or tax or financial advisor with regard to your situation. Although information has been obtained from sources we believe to be reliable, neither the authors nor MUFG vouch for its accuracy, and such information may be incomplete or condensed. Neither the authors nor MUFG shall be liable for any typographical errors or incorrect data obtained from reliable sources or factual information.

About MUFG Americas Holdings Corporation

Headquartered in New York, MUFG Americas Holdings Corporation is a financial holding company and bank holding company with total assets of \$148.1 billion at December 31, 2016. Its main subsidiaries are MUFG Union Bank, N.A. and MUFG Securities Americas Inc. MUFG Union Bank, N.A. provides an array of financial services to individuals, small businesses, middle-market companies, and major corporations. As of December 31, 2016, MUFG Union Bank, N.A. operated 365 branches, comprised primarily of retail banking branches in the West Coast states, along with commercial branches in Texas, Illinois, New York and Georgia, as well as two international offices. MUFG Securities Americas Inc. is a registered securities broker-dealer which engages in capital markets origination transactions, private placements, collateralized financings, securities borrowing and lending transactions, and domestic and foreign debt and equities securities transactions. MUFG Americas Holdings Corporation is owned by MUFG Bank, Ltd. and Mitsubishi UFJ Financial Group, Inc., one of the world's leading financial groups. MUFG Bank, Ltd. is a wholly owned subsidiary of Mitsubishi UFJ Financial Group, Inc. Visit <http://www.unionbank.com/> or <http://www.mufgamericas.com/> for more information.

About MUFG (Mitsubishi UFJ Financial Group, Inc.)

MUFG (Mitsubishi UFJ Financial Group, Inc.) is one of the world's leading financial groups, with total assets of approximately \$2.6 trillion (USD) as of December 31, 2016. Headquartered in Tokyo and with approximately 350 years of history, MUFG is a global network with more than 2,200 offices in nearly 50 countries. The Group has more than 140,000 employees and about 300 entities, offering services including commercial banking, trust banking, securities, credit cards, consumer finance, asset management, and leasing. The Group's operating companies include MUFG Bank, Mitsubishi UFJ Trust and Banking Corporation (Japan's leading trust bank), and Mitsubishi UFJ Securities Holdings Co., Ltd., one of Japan's largest securities firms.

Through close partnerships among our operating companies, the Group aims to "be the world's most trusted financial group," flexibly responding to all of the financial needs of our customers, serving society, and fostering shared and sustainable growth for a better world. MUFG's shares trade on the Tokyo, Nagoya, and New York (MUFG) stock exchanges. Visit www.mufg.jp/english/index.html.